Cybersecurity (CSWG) Assessment of PAP-01

Status: Approved

Were CSWG requirements met? Yes

Comments: Cybersecurity is sufficiently addressed within the output document of PAP-01 titled *Role of IP in the Smart Grid*. The recommendations submitted by the CSWG in the October 25, 2010 to be endorsed by PAP 1 and undertaken by the IETF include:

- Some IPS core protocols were developed before some of the recent updates to cybersecurity technologies, and should be reviewed to determine if updates or enhancements are necessary, such as references to cryptographic technologies or more extended network management.
- The normative and informative reference document list in section 8 should be reviewed to determine if any cybersecurity requirements in those documents need to be updated or enhanced.

Although PAP-01 has fulfilled its requirements for describing the cybersecurity capabilities of the IPS protocols, the CSWG strongly recommends that additional efforts be taken by the SGIP to cover cybersecurity issues related to implementing the IPS. These additional efforts could include, but are not limited to:

- Enhance the network monitoring and control capabilities of the IPS.
- Complete a set of initial security requirements for different types of networks that are emerging from Smart Grid Use Cases.
- Complete a set of initial security requirements for different types of networks that are emerging from Smart Grid Use Cases.
- Use the requirements coming from Smart Grid Use Cases as the basis for developing specific profiles using the IPS RFCs.
- Test IPS-based networks for meeting cybersecurity requirements.
- A version of the NIST IPv6 Profiles document could be developed for the Smart Grid. This suggested approach is similar to that taken by NIST in developing IPv6 Profiles for Federal Agencies.

Recommendations from the CSWG were submitted to the PAP 1 lead and all comments have either been addressed in the revised document, *Role of IP in the Smart Grid,* or other solutions have been developed and are being pursued within the IETF.